



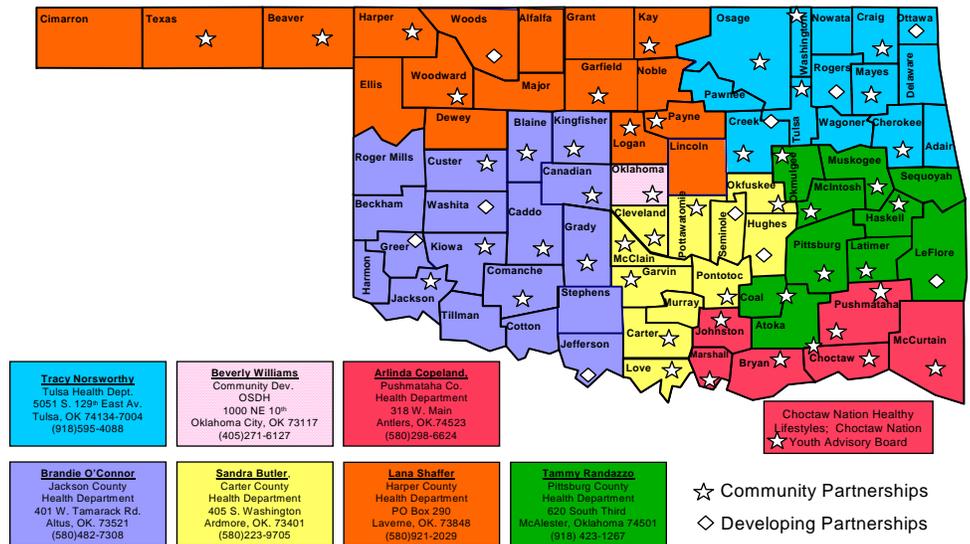
A Look Back To Move Forward

Marshall County

The state of Oklahoma has been in a downward health trend since the 1990's, until recently. Through the efforts of the state and county health departments, state and local governments and the individual communities the health of Oklahomans is looking up. However, we could do more to improve the health of the citizens of Oklahoma.

This report focuses on the health factors for the citizens of Marshall County. We will take a look back to discover what has been affecting the health of the citizens in order to move forward and make healthy, effective and safe changes for all.

TURNING POINT PARTNERSHIPS and FIELD CONSULTANTS DISTRICTS



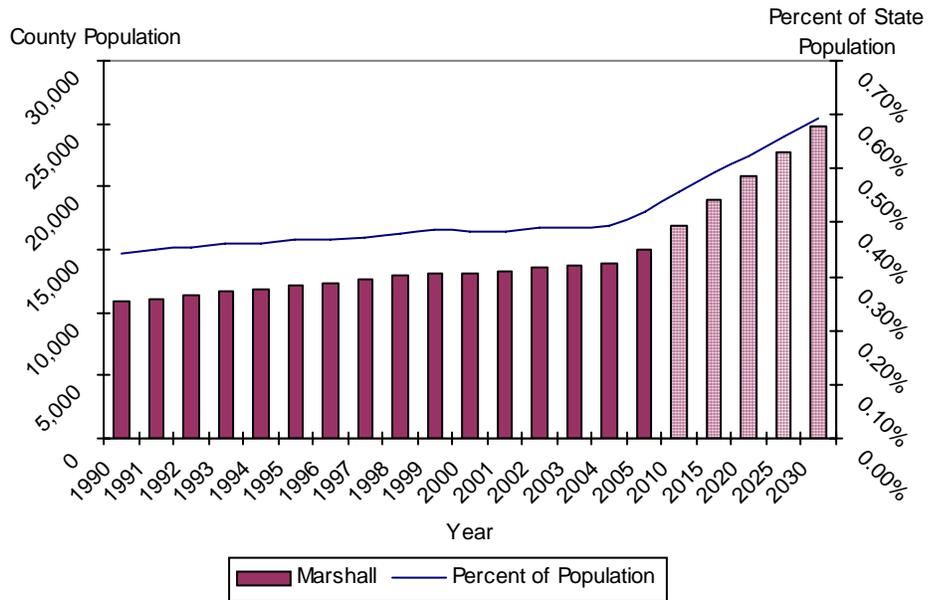
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Demographics

- Population estimates
 - 22% increase from 1990 to 2000 (10,829 to 13,184)
 - 5% increase from 2000 to 2004
 - Ranked 8th for growth in state
- 2000 Census
- Hispanic/Latino ethnicity = 9%
- Race
 - Whites = 78%
 - Native Americans = 9%
 - Blacks = 2%
 - Other/Multiple = 11%
- Age
 - Under 5 = 6%
 - Over 64 = 20%
 - Median age = 41.3 years
- Housing units
 - Occupied = 5,371 (63%)
 - Vacant = 3,146 (37%)
- Disability (ages 21 to 64) = 28.0% national average = 19.2%
- Individuals below poverty = 17.9% national = 12.4% state = 14.7%

Marshall County Population Growth with Projections



* *Vital Statistics*, Health Care Information Systems, OSDH & Centers for Disease Control

Top 10 Leading Causes of Death

The top 10 leading causes of death table on the next page displays a broad picture of the causes of death in Marshall County. Since many health-related issues are unique to specific ages, this table provides causes of death by age group at a glance. The causes of death that are present across almost every age group have been highlighted. From 1983 to 1993 heart disease killed 725 people in Marshall County and

is still the leading cause of death among all age groups. According to the Centers for Disease Control, almost \$400,000 is spent on each heart disease-related death. With an average of 61 deaths a year, heart disease accounts for almost \$23 million a year in medical costs in

Heart disease accounts for almost \$23 million a year in medical costs in Marshall County.

Marshall County. Alzheimer's disease and the complications associated have increased from the 11th ranked cause of death (1983-1993) to the 9th ranked cause of death in persons 65 and older accounting for a 186% increase in deaths.

* *Behavioral Risk Factor Surveillance System*, Health Care Information System, OSDH & *Health Affairs Journal*, R. Strum, 2002

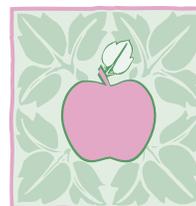
Nutrition and Obesity

With the United States coming in as the most obese country in the world, health care costs related to obesity and poor nutrition are on the rise.

Of the 292 million people in the United States, 129 million are overweight or obese according to their body mass index (BMI). The number of obese (BMI > 29) and overweight (BMI 25-29) Oklahomans has been increasing at the

same rate as the nation, and health care costs are reflecting this downward spiral of health. For persons under the age of 65, on average, health care costs are \$395 more for obese individuals and are even greater for persons over the age of 65.

In 2002-2004, 44.9%



Sensible Foods – Sensible Portions
5 to 9 Fruits & Vegetables a Day

(6,130) of people in Marshall County were considered obese which accounted for an additional \$2,421,350 in medical costs for the county. These costs are underestimated because they do not take into account the percentage of obese or overweight persons who are over the age of 65.

Top 10 Causes of Death by Age Group

Marshall County 1993-2003

Rank	0-4	05-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	CONGENITAL ANOMALIES 4	UNINTENT. INJURY 3	UNINTENT. INJURY 10	UNINTENT. INJURY 8	UNINTENT. INJURY 11	HEART DISEASE 31	CANCER 78	HEART DISEASE 574	HEART DISEASE 670
2	PERINATAL PERIOD 3	NON-CANCEROUS TUMOR 1	SUICIDE 5	HIV 2	HEART DISEASE 9	CANCER 19	HEART DISEASE 55	CANCER 288	CANCER 394
3	UNINTENT. INJURY 3	OTHER 1	CANCER 2	SUICIDE 2	CANCER 6	UNINTENT. INJURY 12	BRONCHITIS EMPHYSEMA/ASTHMA 9	STROKE 95	STROKE 110
4	STROKE 1		STROKE 1	STROKE 1	SUICIDE 5	BRONCHITIS EMPHYSEMA/ASTHMA 5	STROKE 7	BRONCHITIS EMPHYSEMA/ASTHMA 70	UNINTENT. INJURY 81
5	MENINGITIS 1		CONGENITAL ANOMALIES 1	DIA BETES MELLITUS 1	STROKE 2	LIVER DISEASE 4	DIA BETES MELLITUS 6	INFLUENZA/PNEUMONIA 70	INFLUENZA/PNEUMONIA 74
6	SEPTICEMIA (BLOOD POISONING) 1			HEART DISEASE 1	DIA BETES MELLITUS 2	SUICIDE 4	UNINTENT. INJURY 3	DIA BETES MELLITUS 36	DIA BETES MELLITUS 47
7	SIDS 1			HOMICIDE/LEGAL 1	HIV 2	STROKE 3	INFLUENZA/PNEUMONIA 3	UNINTENT. INJURY 29	KIDNEY DISEASE 29
8	OTHER 4			CANCER 1	HOMICIDE/LEGAL 2	DIA BETES MELLITUS 2	LIVER DISEASE 3	KIDNEY DISEASE 27	SUICIDE 21
10				SEPTICEMIA (BLOOD POISONING) 1	VIRAL HEPATITIS 2	VIRAL HEPATITIS 2	ATHERO-SCLEROSIS 1	ALZHEIMER'S DISEASE 20	ALZHEIMER'S DISEASE 20
					TWO CAUSES TIED 1	SIX CAUSES TIED 1	SIX CAUSES TIED 1	SEPTICEMIA (BLOOD POISONING) 14	SEPTICEMIA (BLOOD POISONING) 18

Data source: Vital Statistics, Health Care Information Division, Oklahoma State Department of Health

Produced by: Community Development Service, Community Health Service, Oklahoma State Department of Health

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Injury and Violence

Across the nation and the state of Oklahoma, unintentional and violence-related injuries are on the rise. Unintentional injuries account for the 4th leading cause of death in the United States and the 5th leading cause of death in Oklahoma from 1999-2002. For persons ages 1 to 44 in Oklahoma, unintentional injuries are the leading cause of death.

This trend does not change much in Marshall County. Unintentional injuries are the leading cause of death from ages 5 to 44.

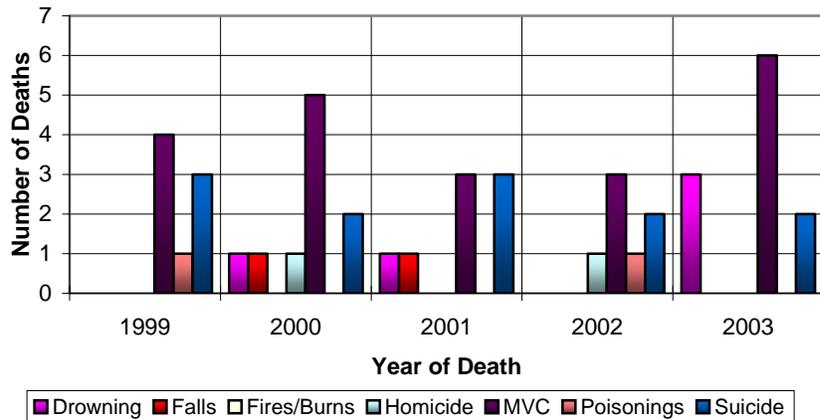
It is estimated that for every motor vehicle-related death \$1.1 million in economic costs are incurred. For Marshall County which has an average of 4.2 motor vehicle-related deaths a year,

that translates to almost \$5 million a year.

Violence-related injuries (homicide

and suicide) in Marshall County are ranked in the top 10 in three of the eight age groups (see Top 10 list on page 3).

Injury and Violence-Related Deaths in Marshall County, 1999-2003



* *Vital Statistics*, Health Care Information Systems, OSDH & Centers for Disease Control

Tobacco Use

According to the 2005 State of the State's Health Report, tobacco use among Oklahomans has remained fairly stable from 1990 to 2002. Oklahoma has been consistently higher in its tobacco use than the nation and is 30% higher than the nation on the amount of tobacco consumed per capita (103 packs vs. 79 packs).

Tobacco use is no longer just the

problem of the individual but also the community as a whole. With health care costs on the rise, targeting areas such as tobacco use is an effective way to control those costs.

In 2002, the CDC estimated that a person that used tobacco accrued over \$3,300 in health care costs per year. According to the Be-

havioral Risk Factor Surveillance Sys-

tem, it is estimated that 30.4% (4,150) of people in Marshall County use tobacco of some sort. Medical costs accumulated by those persons are almost \$14 million a year for Marshall County.

“Medical costs accumulated by those persons are almost \$14 million a year for Marshall County”

* *Behavioral Risk Factor Surveillance System*, Health Care Information System, OSDH & American Diabetes Association, 2002

Physical Activity, Wellness and Diabetes

The increasing inactivity of the U.S. population is contributing to an increase in numerous poor health-related outcomes. Physical inactivity robs the body of precious energy needed to function properly, in turn health declines and rates of various chronic diseases escalate.

According to the 2002-2004 Behavioral Risk Factor Surveillance System (BRFSS), it is estimated that 36.6%

(4,997) of people in Marshall County had no leisure activity in the past month at the time they were surveyed.

The BRFSS also indicated that 4.6% (628) of Marshall County citizens have been diagnosed by a health professional as having dia-



Increase activity gradually. Moderate exercise for 30 minutes 5 days a week.

betes. In 2002, the per capita annual healthcare costs for people with diabetes was \$13,243 compared to \$2,560 for people without diabetes. Persons with diabetes accumulated health care costs of \$8,316,604 in one year for Marshall County.

Teen Pregnancy

While births to teen mothers (age 15 to 19) are on the decline in both the U.S. and Oklahoma, Oklahoma has moved up in rank from 13th to 8th in the country. In 1993 the rate of teen births

was 60.0 (per 1,000 15-19 year old females) in the U.S. and 66.6 in Oklahoma. In 2003, the rate decreased to 41.7 in the U.S. and 55.8 in Oklahoma, a decrease of

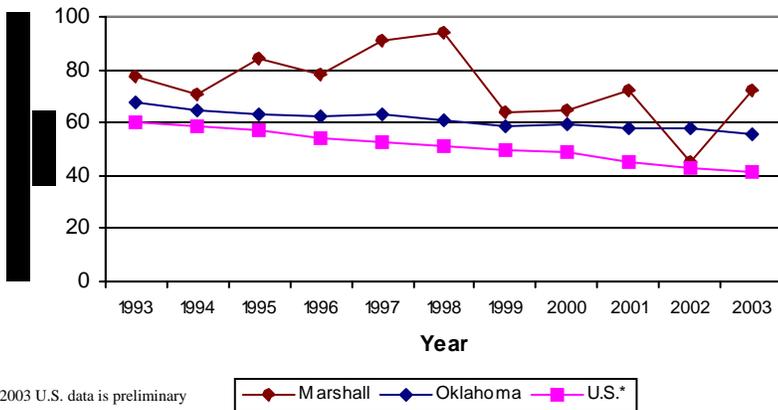
31% and 7%, respectively.

Children of teen mothers are more likely to display poor health and social outcomes than those of older mothers, such as premature birth, low birth weight, higher rates of abuse and neglect, and more likely to go to foster care or do poorly in school. Additionally, births to teen mothers accumulate \$3,200 a year for each teenage birth, which is passed on to citizens.

According to Oklahoma Vital Statistics, Marshall County had a teen birth rate of 72 in 2003 which was a 60% increase from 2002 (44.9) but a 7% decrease since 1993 (77.6).

With an average of 29 births per year, teen pregnancy costs the citizens of Marshall County \$92,800 a year.

Rate of Live Births to Teen Mothers, Ages 15-19, 1993 to 2003



*2003 U.S. data is preliminary

Note: Five births to a mother 10-14 years of age occurred during the 11 year period.

Poverty

* U.S. Census Bureau

As the nation advances in technology and the ability to detect and prevent disease at an earlier stage, persons that are impoverished carry a large burden of poor health outcomes. Higher incidences of unplanned or unwanted pregnancies, teen pregnancy, inadequate

prenatal care, higher rates of low-birth-weight babies, infant deaths and low immunization rates are all associated with poverty along with a myriad of other adverse health outcomes.

According to the 2000 census, 17.9% of persons in Marshall County for

whom poverty status was known had an income below what was needed to live at the federal poverty level. Marshall County is 22% above the state (14.7%) and 44% above the nation (12.4%) for persons with incomes below the federal poverty level.

Income to Poverty Ratio, Marshall County, 2000 Census

Poverty Level	Total	50% below	51% to 99% below	100% to 149% above	150% to 199% above	200% and above
Population	12,888	934	1,376	2,049	1,650	6,879
Cumulative Population		934	2,310	4,359	6,009	12,888
% of Total	100.0%	7.2%	10.7%	15.9%	12.8%	53.4%
Cumulative %		7.2%	17.9%	33.8%	46.6%	100.0%

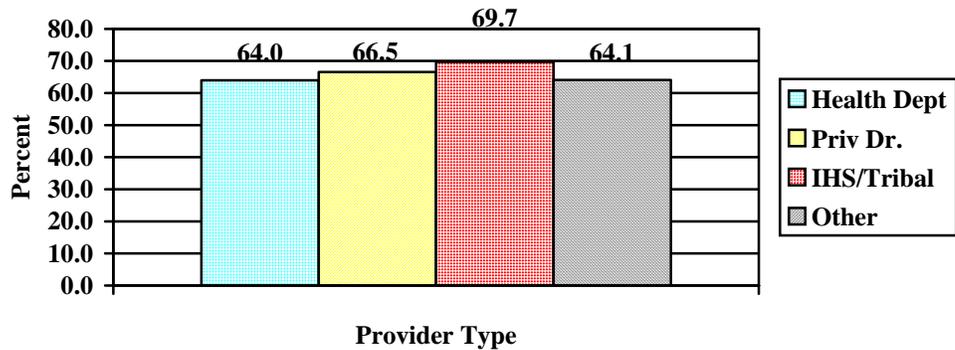
OK By One - State Immunization Data

* 2 Year-old Immunization Survey, Immunization Service, OSDH

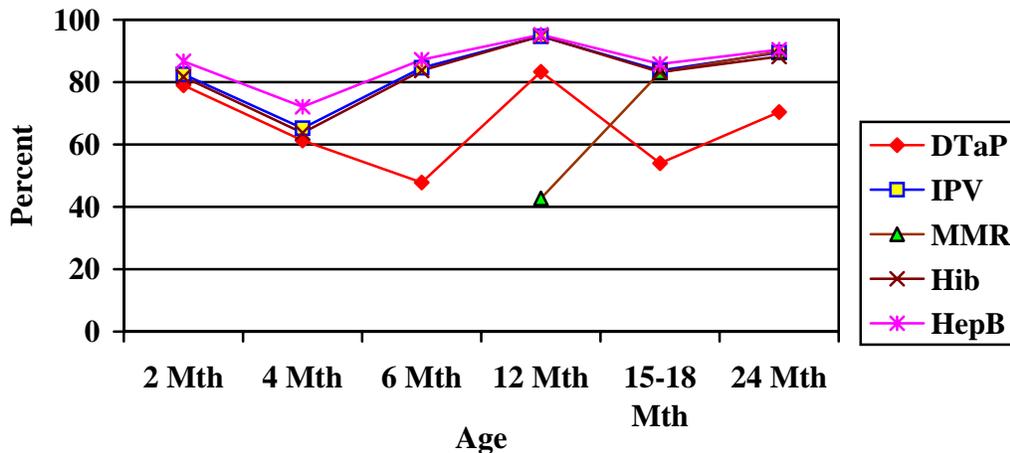
2003-04 Immunization Coverage Rates



4:3:1:1:3 Coverage by Location of Shots, Oklahoma, 2004

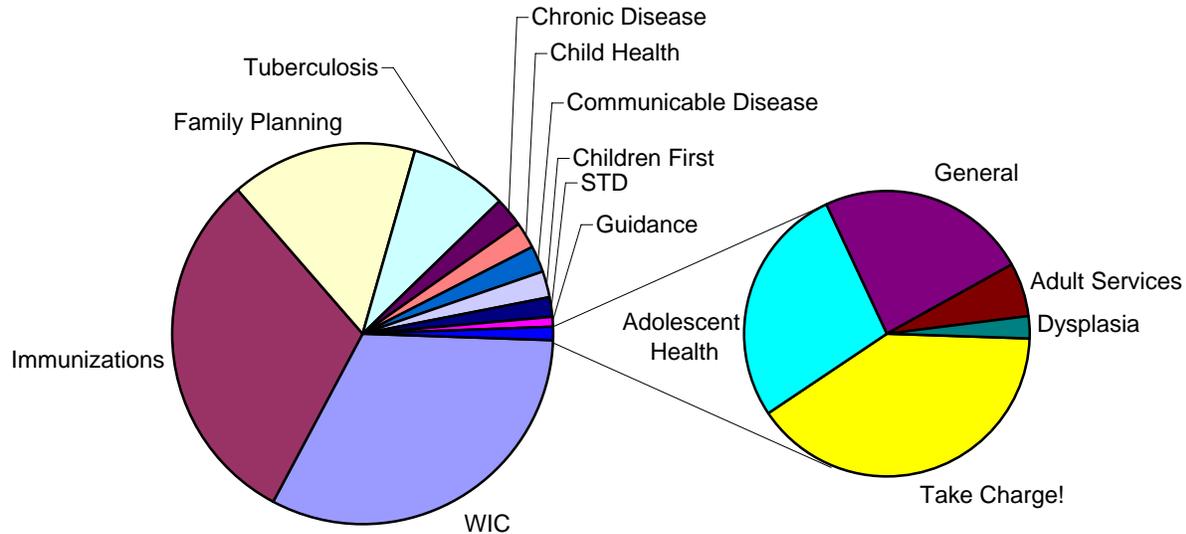


Oklahoma Children On Schedule by Antigen, 2004



**Note: County level data will be available soon.

Attended Appointments for Marshall County Health Department, State Fiscal Year 05



Health Care Costs Summary

Cardiovascular Disease (Heart Disease)

- Average 61 deaths a year
- \$369,476.69 per death
- Total—\$22,538,078.09 a year

Obesity

- 44.9% of population (6,130)
- \$395.00 in additional medical costs per person
- Total—\$2,421,350.00

Motor Vehicle-Related Injury Death

- Average 4.2 deaths per year
- \$1,120,000.00 in economic costs per death
- Total—\$4,704,000.00 a year

Tobacco Use

- 30.4% of population (4,150)
- \$3,300.00 in health care costs
- Total—\$13,695,000.00 a year

Diabetes

- 4.6% of population (628)
- \$13,243.00 in healthcare costs a year
- Total—\$8,316,604.00 a year

Teen Pregnancy

- Average of 29 births to teen mothers per year
- \$3,200.00 in costs for each birth a year
- Total—\$92,800.00 a year



Grand Total for Marshall County:

\$51,767,832.09



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DEPARTMENT OF HEALTH**

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Looking Back to Move Forward

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The Oklahoma Turning Point Initiative is public health improvement in action. The success of the Turning Point process involves a partnership between the department of health, local communities, and policy-makers. The Oklahoma Turning point engine is fueled by a community-based decision making process whereby local communities tap into the capacities, strengths, and vision of their citizens to create and promote positive, sustainable changes in the public health system, and the public's health.

Oklahoma Turning POINT



*Oklahoma Community Partners
in Public Health Innovation*